

AMENDMENTS TO THE CLAIMS

Listing of the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A device for direct delivery of a shear thickening fluid having therapeutic properties to a target site, the device comprising:
a channel having a proximal end, ~~and~~ a distal end and a central lumen extending therethrough, the central lumen having a longitudinal axis, the channel containing a shear thickening fluid having therapeutic properties, the channel configured to expose the shear thickening fluid to a viscosity adjuster; and

wherein the viscosity adjuster comprises at least two non-overlapping projections extending from one or more walls of the channel and leaving an open flow channel coincident with ~~parallel to~~ the central lumen's longitudinal axis.

2-18. (Cancelled)

19. (Currently Amended) A method for directly delivering a shear thickening fluid having therapeutic properties to a target site, the method comprising:

loading the fluid in a channel, the channel having a central lumen and a viscosity adjuster, the central lumen having a longitudinal axis, and the viscosity adjuster comprising at least two non-overlapping projections extending from one or more walls of the channel and leaving an open flow channel coincident with ~~parallel to~~ the central lumen's longitudinal axis;

adjusting the viscosity of the fluid by exposing the fluid to the viscosity adjuster of the channel; and

delivering the fluid to a target site.

20. (Previously Presented) The method of claim 19, wherein adjusting the viscosity increases the viscosity of the shear thickening fluid.
21. (Cancelled)
22. (Previously Presented) The device of claim 1, wherein the viscosity adjuster is at the distal end only of the lumen.
23. (Previously Presented) The device of claim 1, wherein the shear thickening fluid having therapeutic properties comprises a shear thickening fluid pre-loaded with a therapeutic.
24. (Previously Presented) The device of claim 1, wherein the therapeutic is a pharmaceutically active compound.
25. (Previously Presented) The method of claim 19, wherein the viscosity adjuster is at the distal end only of the lumen.
26. (Previously Presented) The method of claim 19, wherein the shear thickening fluid having therapeutic properties comprises a shear thickening fluid pre-loaded with a therapeutic.
27. (Previously Presented) The method of claim 19, wherein the therapeutic is a pharmaceutically active compound.
28. (Previously Presented) The device of claim 1, wherein at least one of the at least two non-overlapping projections comprises a post- or peg-like shape.

29. (Previously Presented) The device of claim 1, wherein at least one of the at least two non-overlapping projections comprises a truncated cone shape.

30. (Previously Presented) The device of claim 1, wherein at least one of the at least two non-overlapping projections comprises a ridged shape.

31. (Previously Presented) The device of claim 1, wherein the at least two non-overlapping projections define at least one constricted flow orifice.

32. (Previously Presented) The device of claim 31, wherein the at least one constricted flow orifice comprises a single flow orifice having a circular shape.

33. (Previously Presented) The device of claim 31, wherein the at least one constricted flow orifice comprises a single flow orifice having an ovular shape.

34. (Previously Presented) The device of claim 31, wherein the at least one constricted flow orifice comprises a plurality of circular-shaped flow orifices.

35. (Previously Presented) The device of claim 1, wherein the at least two non-overlapping projections extend in a substantially perpendicular direction from the one or more walls of the channel.

36-39. (Cancelled)

40. (New) The device of claim 1, wherein the open flow channel extends from the proximal end to the distal end of the channel.

41. (New) The device of claim 1, wherein the open flow channel is continuous and straight.

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42. (New) The device of claim 1, wherein the projections comprise stainless steel, nitinol or teflon.